FACT SHEET FOR PREPARATION OF STATE WASTE DISCHARGE PERMIT FOR GN PLYWOOD, INC (dba Mount Baker Plywood)

INDUSTRY CONTACTS: Tim Shannon - Operations Coordinator

PERMIT NUMBER: ST 7253

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BACKGROUND:

The company is engaged in the production of plywood from hardwood veneer and logs. The plywood operations at this site were undertaken in 1951. The plant had previously been used for furniture production. In February 1992, the then operating cooperative was sold to a partnership and subsequently went into receivership, and the assets were sold to Swaner Companies, Inc. GN Plywood, Inc. is the new owner. The expired permit was transferred to GN Plywood, by means of a WDOE letter dated January 21, 1994.

A State Waste Discharge Permit was issued to this facility on March 14, 1983, and expired March 14, 1988. The permit was extended by letter on March 14, 1988. The old permit contained a flow limitation of 3000 gallons per day daily average and 4000 gallons per day daily maximum. The permit also contained a limitation of 100 mg/L for oil and grease and 1 mg/L for total phenolics. The above limitations applied to press pit oil water separator subnatant and boiler blowdown.

The steps in manufacture of plywood at this plant are:

1. Debarking of logs (cottonwood),
2. Turning log on veneer lathe,
3. Sorting of Veneers,
4. Drying of Veneers,
5. Spreading glue onto the veneer,
6. Prepressing the freshly glued veneers, and,
7. Pressing.

Waste bark from the debarking operations is used as hog fuel or is sent to Georgia Pacific.

SOURCES OF WASTEWATER

1. PRESS PIT: The press pit is located below the plywood press and is pumped out twice per week. The pit is cleaned out approximately once per year. This pit typically contains glue drippings, veneer pieces and condensed steam from the press. Water from the press pit is pumped to an oil/water separator. The oil fraction is stored in a 1000 gallon tank and is reused on chains and belts.

2. GLUE SPREADER WASH WATER: Glue spreader washwater is stored in a tank and used as makeup water for future glue mixes. There is usually no excess to discharge to the sewer, although this is done occasionally in small amounts.

3. CONDENSATE RETURN: Boilers are used to produce heat to dry the veneers. Condensate return from the heaters amounts to approximately 1000 gallons per day, and is rerouted to the boilers, except for excess.

4. BOILER BLOWDOWN: Boiler blowdown is approximately 1000 gallons per day. The blowdown is collected in a sump before being pumped overhead to the sanitary sewer. All domestic wastewater from the mill is also pumped to the main sump.

GLUE COMPOUNDING ROOM

Types of glues used are urea aldehyde resin which contain some formaldehyde. The main type of urea resin glue is Bordens LF571, which comes in a liquid form, and is compounded with an ammonium chloride catalyst. No phenolic glue is used. Although water is used in the production of glue, by mixing with the above indgredients, no wastewater is produced in the process.

BASIS FOR LIMITATIONS AND MONITORING

Phenolic Compounds: As this plant has eliminated its use of phenolic glues, monitoring for phenolic compounds has been eliminated from this permit.

Formaldehyde: Although some formaldehyde and urea aldehyde related compounds may enter the sanitary sewer from the press pit area, the concentrations are expected to be small. Given the ability of secondary treatment to remove urea aldehydes and related compounds, no limitations or monitoring requirements have been included for this compound.

Oil and Grease: An oil and grease limitation of 100 mg/L has been placed in this permit. This limitation is based on AKART capabilities for a simple baffled separator. As this effluent is not likely to contain large amounts of grease, the monitoring requirement is twice per year.

Flow Monitoring: Total water usage averages approximately 15,000 gallons per day, and maximum daily usage has been as high as 30,000 gallons per day. However, a significant proportion of this water is lost in steam production despite efforts to recycle condensate. Recently, a leaking boiler tube was repaired resulting in considerable savings in boiler associated losses. The boiler had previously consumed 300 gallons per hour. This has been reduced to 600 gallons per day through the boiler tube repair and modification undertaken to increase collection and recycling of condensate. Some water is also included in glue and goes out with the product. Despite the fact that logs are not sprayed, the above water losses make it impractical to monitor flow via the supply meters.

Two water supply meters have been installed. The first meter measures all water supply. The second meter measures water supplied to the boiler.

Excess condensate discharge together with blowdown has been an average of 1000 gallons per day. A daily maximum of 2000 gallons per day has been placed in the permit in order to allow for discharge for boiler cleaning or other unusual operations. As a result of the small flow and lack of a flow meter for the discharge, no monitoring is required for compliance with the flow limitation.

Flow through the oil/water separator for non-boiler related uses has averaged less than 500 gallons per day. A daily maximum of 1000 gallons per day has been placed in the permit in order to allow for unusual uses. As a result of the small flow and lack of a wastewater flow meter, no monitoring requirement for flow has been placed in this permit.

SOLID WASTE PLAN

A requirement for a solid waste plan has been included in this permit due to the large quantity of solid waste generated at this plant.

SPILL PLAN

No spill plan requirement has been placed in this permit due to the lack of significant quantities of hazardous liquids stored on-site.

STORMWATER

This plant has coverage under the general stormwater permit.

SEPA COMPLIANCE

This preexisting plant is exempt from SEPA requirements.

RECOMMENDATION

I recommend that this permit be issued for a duration of five years so as to expire in 2000, the Nooksack Basin permitting year.